

canadensis); pubescence in foveae not pure white and densely appressed as in *canadensis*; front more coarsely striate; clypeus with punctures about twice as close together; mesoscutum much more sparsely punctured; dorsal surface of prepodeum almost shining, reticulate (in *canadensis* dull and coarsely granular).

OBITUARY

J. H. EMERTON

In 1882 there appeared in the Transactions of the Connecticut Academy an article on the New England Spiders of the Family Theridiidae. It was by J. H. Emerton and marked the beginning of a new era in American Arachnology. The chief feature of this paper was the series of twenty-four excellently drawn plates. These illustrated the important sexual characters. In two years there followed a paper on the Epeiridae, and later similar articles on the other families, and in 1894 a paper on Canadian spiders. These papers were notable because of the illustrations. Numerous, often beautifully executed, they were particularly valuable because they conveyed at a glance the characteristic appearance of the spider or some portion of it.

James Henry Emerton was born at Salem, Mass., 31 March 1847. He attended the local schools. A helper in his father's drug-store, Mr. Geo. F. Markoe, interested the boy, who was naturally rather frail, in outdoor life. At the age of fifteen he was visiting the Essex Institute, where he became acquainted with A. S. Packard, F. W. Putnam, John Robinson, and Caleb Cooke. At first young Emerton collected insects and other invertebrates, but soon turned his attention almost wholly to spiders, and ever after he was the principal authority on these animals in this country. He was at the Boston Society of Natural History in 1873 and 1874, and in charge of the Salem Museum in 1879.

With a natural aptitude for drawing he soon learned the art and later became an expert modeler.

As a natural history artist he obtained work at Albany, N. Y., with Prof. A. Hall, later at Madison, Wisconsin, with Prof. A. Winchell, and by 1880 was at Yale University Museum as an assistant. Here he married Mary A. Hills, 25 Dec. 1884, who died in 1898.

Shortly after marriage he moved to Boston, which thereafter was his home. He died on 5 Dec. 1930.

As a young man he travelled extensively in New England, visiting all the states several times and collecting spiders in over one hundred localities. In 1875 he spent nearly a year in Europe. He took with him a collection of over three hundred species of spiders for comparison with European forms, and from Leipzig in Dec. 1875 wrote an article on the results. He visited London, Paris, Berlin, Jena, Leipzig, and Stockholm, meeting Cambridge, Simon, L. Koch, and Thorell.

On his return he continued his New England collecting and later went farther afield. He collected in the Southern States partly with A. P. Morse, sailed with A. Agassiz to the West Indies, visited the Sierras with G. W. Peckham, made several trips to Canada, and in later life to The Pas near Hudson Bay.

As an artist he illustrated, at least in part, Packard's Guide to the Study of Insects, Packard's Monograph of the Geometridae, Scudder's Butterflies of New England, Minot's Textbook of Embryology, Eaton's Fernbook, Peckham's various papers on spiders, some articles for the Fish Commission, and made a host of drawings for A. E. Verrill and others. He made the famous models of the octopus and squid in the Agassiz and other museums, and a greater number of anatomical models for medical schools.

A charter member of the Cambridge Entomological Club, he joined practically all natural history organizations at Boston, including the Appalachian Club, and was active in the meetings of the Botanical, Mycological, Malacological, and Audubon societies, but the organization nearest his heart was the Federation of New England Natural History Societies, which he kept going through many discouragements. He was a fellow of the Entomological Society of America.

His first papers were in the early numbers of "Pysche"; in 1875 he added collecting notes and two plates to the reprint of Hentz's Spiders of the United States. In 1878 he published at Salem "The Structure and Habits of Spiders"; in 1902 "The Common Spiders of the United States", which is a more comprehensive work with many new and beautiful illustrations. From Salem was also published "Life on the Seashore" giving an account of the invertebrates of the New England coast.

His articles on New England Spiders, already mentioned, were followed by several supplemental papers on New England and Canadian spiders. Altogether he described over 350 species of spiders the types of most of which are in the Museum of Comparative Zoology. He became much interested in the distribution of New England and other northern spiders and wrote several papers on the subject. A number of his articles dealt with the habits of spiders and every autumn for many years he faithfully watched for flying spiders.

Aside from being a naturalist he was an artist for the sake of art. He painted many water colors, often based on the sea, the shore, or ships. For several seasons this was done at Ipswich and in later years he went regularly to Gloucester for painting.

To one who knew him for many years, his independent and adventurous spirit, his directness and simplicity, his kindly interest in the scientific work of others, and his continuous endeavors to attract the young to the study of Natural History overtop much of his scientific achievement. NATHAN BANKS.